Remarks

The July 31, 2009 Official Action and the references cited therein have been carefully reviewed. In view of the foregoing amendments and the following remarks, favorable reconsideration and allowance of this application are respectfully requested.

At the outset it is noted that a shortened statutory response period of three (3) months was set forth in the July 31, 2009 Official Action. Therefore, the initial due date for response is October 30, 2009.

As another preliminary matter, Applicants affirm the election of Group I, claims 1-12, drawn to methods of manufacturing metallized paper.

Claims 1-12 have been rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Canadian Patent Application No. 2,164,154 in view of U.S. Patent 7,425,246.

The foregoing rejection constitutes all of the grounds set forth in the July 31, 2009 Official Action for refusing the present application.

In accordance with the instant amendment, claim 1 has been amended. Support for the amendment to claim 1 can be found throughout the specification including, for example, in original claims 2 and 4. No new matter has been introduced into this application by reason of any of the amendments presented herewith.

In view of the amendments presented herewith and the reasons set forth in this response, Applicants respectfully submit that the 35 U.S.C. §103(a) rejection of claims 1-12, as set forth in the July 31, 2009 Official Action, cannot be maintained. This ground of rejection is, therefore, respectfully traversed.

CLAIMS 1-12 ARE PATENTABLE OVER THE '154 PATENT APPLICATION IN VIEW OF THE '246 PATENT

Claims 1-12 have been rejected under 35 U.S.C. §103(a) as allegedly unpatentable over the '154 application in

view of the '246 patent. The '154 application allegedly discloses paper surfaces which are aluminized. The Examiner acknowledges that the '154 application does not teach using curtain coating. However, it is the Examiner's position that it would have been obvious to a skilled artisan to use curtain coating based on the '246 patent.

At page 5 of the instant Official Action, the Examiner acknowledges that the '154 application and the '246 patent "fail to teach the viscosities and static surface tensions, as required by claims 2-4." The Examiner alleges that it would have been obvious to a skilled artisan to "optimize the viscosities and static surface tensions" because "it is well settled in the determination of optimum values of cause effective variables such as the viscosities [and] static surface tension ... of the aqueous film forming composition is within the skill of one practicing the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980)."

Applicants respectfully disagree with the Examiner's position. The MPEP at §2144.05(II)(B) clearly states that a "particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). Here, the references cited by the Examiner fail to teach or suggest that the recited viscosities and static surface tension of the aqueous film-forming compositions would achieve a recognized result or benefit associated with the generation of a metalized paper, as instantly claimed. As such, it is evident that the Examiner has wholly failed to set forth a *prima facie* case of obviousness. Indeed, the '154 application, which discloses coating agents for the coating of paper surfaces to be aluminized, only discusses the importance of the size of polymer particles in the aqueous polymer dispersion (see, e.g., the Abstract). The '154 application is wholly silent as

to the viscosity and static surface tension of any aqueous film-forming composition and wholly fails to teach or suggest any correlation between the viscosity and static surface tension and the usability of an aqueous film-forming composition in the instantly claimed methods of making metalized paper. In other words, the '154 application fails to establish viscosity and static surface tension as result-effective variables (variables which achieves a recognized result) with regard to making metallized paper. The '246 patent is not directed to metallized paper and also fails to establish viscosity and static surface tension as result-effective variables.

In addition to the above, the instant application also demonstrates clear unexpectedly superior results with the instantly claimed methods for synthesizing metallized paper. For example, Examples 11 and 14 demonstrate that the use of an aqueous film-forming composition that has a low-shear viscosity, as measured in a Brookfield viscometer at 60 rpm and 20°C, lower than the claimed range of 60 and 220 mPas results in irregular coating of the metallized paper. Indeed, the resultant paper in Example 11, wherein the low-shear viscosity was only 10 mPas, had "practically no gloss" and, in Example 14, a composition having a low-shear viscosity of 20 mPas was used which exhibited poor stability as a curtain and dried as waves on the paper. In Example 13, an aqueous film-forming composition having a static surface tension, measured by a ring tensiometer, greater than the claimed range of 25 and 40 dyn/cm, was utilized. The use of such a composition resulted in irregular application "with areas of very low layer thickness." Moreover, in Example 15, an aqueous film-forming composition having a high-shear viscosity, measured in a Haake viscometer at 37,750 s^{-1} and 20°C, greater than the claimed range of 2.3 to 35 mPas proved defective. Indeed, Example 15 states that the curtain did not flow properly and that there was a "heel at the application point" and areas of paper "with barely any film."

In view of the foregoing, it is evident that the instant application clearly demonstrates the unexpectedly superior range of viscosities and static surface tension associated with better manufacture of metallized paper. The references cited by the Examiner neither teach nor suggest the alteration of these variables for identifying superior compositions for the synthesis of metallized paper.

In view of all of the foregoing, it is evident that the references, considered as a whole, fail to teach or suggest each and every element of the instantly claimed methods. Accordingly, Applicants respectfully submit the rejection of claims 1-12 under 35 U.S.C. §103(a) cannot be reasonably maintained. Withdrawal of this rejection is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully urged that the objection and rejections set forth in the July 31, 2009 Official Action be withdrawn and that this application be passed to issue.

In the event the Examiner is not persuaded as to the allowability of any claim, and it appears that any outstanding issues may be resolved through a telephone interview, the Examiner is requested to call the undersigned at the phone number given below.

Respectfully submitted,
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